

# Staphylococcus aureus (Staph infection)

This sheet talks about exposure to *Staphylococcus aureus* and Staph infections in a pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

#### What is Staphylococcus aureus / a Staph infection?

Staphylococcus aureus (Staph) are a type of bacteria (germ). Staph bacterium are commonly found on the skin or in the nose. If Staph bacterium grow out of control or gets inside the body through a cut or sore, this could lead to a Staph infection. Staph infections can cause boils or blisters on the skin; or infections in the lungs (pneumonia), bloodstream (sepsis), or in a wound. Methicillin-resistant S. aureus, commonly known as MRSA is a type of Staphylococcus aureus that can be difficult to treat because it is resistant to antibiotics.

People with a higher chance of getting a staph infection include: sick people in hospitals, people recovering from surgeries or other medical procedures, people living in over-crowded conditions (shelters or prisons), children in daycare, intravenous (IV) drug users, people with weakened immune systems, people with chronic health conditions (like diabetes or cancer), athletes, and military personnel.

### Can I get Staph food poisoning if I eat infected food?

Staph bacterium make toxins that can cause a gastrointestinal (GI) illness if contaminated food is eaten. Staph bacteria can be killed by cooking, but the toxins they made can survive and cause illness. The best way to avoid infecting food is to practice good food handling practices. People who carry Staph can contaminate food if they don't wash their hands before touching it. Staph food poisoning can start 30 minutes to 8 hours after eating contaminated food. Symptoms can be nausea, vomiting, stomach pain and diarrhea. This type of infection with Staph bacteria is usually not serious and generally does not last for more than a day.

## Can I get a Staph infection through my job?

There are occupations where Staph infections could happen more often, such as healthcare professionals, workers that prepare foods, veterinarians, and rescue personnel. To prevent or reduce the chance of Staph infections, it is important to wash hands, follow all of the safety protocols for the job, and use protective equipment when needed.

# I am pregnant. If my partner, other family member, or friend has a confirmed Staph skin infection, what can I do to reduce my chances of getting the infection?

- Do not touch the person's sores, cuts, or bandages.
- Wash your hands with soap and water often, and always wash your hands after direct contact with anyone who has any skin infection.
- Do not share towels, soap, razors, tweezers or other personal items.
- If you need to wash the laundry for a person with a Staph infection, launder in warmest temperature recommended by manufacturer's directions and dry the clothes thoroughly.

### I have a Staph infection. Can it make it harder for me to become pregnant?

It is not known if a Staph infection can make it harder to get pregnant.

# Does having/getting a Staph infection increase the chance for miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Based on the studies reviewed, it is not known if a Staph infection might increase the chance of miscarriage.



#### Does having/getting a Staph infection increase the risk of birth defects?

Every pregnancy starts with a 3-5% chance of having a birth defect. This is called the background risk. Based on the studies reviewed, staph infections have not been linked a higher chance for birth defects. However, Staph infections that reach/enter the blood can cause a fever. Fevers of 101 degrees or higher might increase the chance for some birth defects. See our fact sheet on hyperthermia at <a href="https://mothertobaby.org/fact-sheets/hyperthermia-pregnancy/">https://mothertobaby.org/fact-sheets/hyperthermia-pregnancy/</a> for more information about fevers.

#### Would having/getting a Staph infection cause other pregnancy complications?

If the amniotic fluid (fluid around the baby) were to become infected with Staph, this could cause preterm delivery (having the baby before 37 weeks). Babies can also get Staph infections from their moms at the time of birth. Most of the time this does not cause problems for the baby, but sometimes it can cause illness in the newborn.

#### Does having/getting a Staph infection in pregnancy cause long-term problems for the child?

Studies have not been done to see if having a Staph infection during a pregnancy might cause long-term problems for the child.

#### Can I breastfeed while I have a Staph infection?

Staph infections are a common cause of mastitis infections in the breast. According to the American Academy of Pediatrics individuals who have mastitis can continue to nurse.

It is possible that a Staph infection could spread to a nursing child during breastfeeding from direct skin contact. If you have a Staph skin infection, it is important to keep the wound covered with bandages so that the baby does not touch the wound or any discharge from it. This is important even if you are not currently breastfeeding. The baby could also become infected from contact with clothing, bedding or other materials that have the bacteria on them.

Additionally, there are some reports of infants getting a Staph infection through expressed (pumped) breast milk that was contaminated from pumping equipment or storage containers. Therefore, it is important to thoroughly wash and sterilize pumping equipment and storage containers, as well as your hands when pumping breast milk.

Not all Staph infections require treatment. However, if you are being treated, you can contact MotherToBaby to discuss your specific medication(s) during breastfeeding. Be sure to discuss your breastfeeding questions with your healthcare provider.

# If a male has a Staph infections, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?

Some studies have suggested that a Staph infection might affect sperm and fertility. In general, exposures that fathers or sperm donors have are unlikely to increase the risk to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at <a href="https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/">https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/</a>.



#### Selected References:

- Amir LH, et al. 2006. A case-control study of mastitis: nasal carriage of Staphylococcus aureus. BMC Family Practice 7:57.
- Behari P, et al. 2004. Transmission of methicillin-resistant Staphylococcus aureus to preterm infants through breast milk. Infect Control Hosp Epidemiol 25(9):778-780.
- Briggs G. 2005. Drugs in Pregnancy and Lactation, a reference guide to fetal and neonatal risk. 7th Ed. Baltimore, MD: Williams & Williams.
- Elston DM 2007. Community acquired methicillin-resistant Staphylococcus aureus. J Am Acad Dermatol 56(1):1-16.
- Farsimadan M, Motamedifar M. 2020. Bacterial infection of the male reproductive system causing infertility. J Reprod Immunol. 142:103183.
- Frank A, et al. 1999. Community-acquired and clindamycin-susceptible methicillin-resistant Staphylococcus aureus in children. Ped Inf Dis J 18:993-1000.
- Gastelum DT, et al. 2005. Transmission of community-associated methicillin-resistant Staphylococcus aureus from breast milk in the neonatal intensive care unit. Pediatr Infect Dis J. 24(12):1122-1124. 2
- Goto H, et al. 2003. Susceptibilities of bacteria isolated from patients with lower respiratory infectious diseases to antibiotics. Jpn J Antibiot. 58(3):326-58.
- Kawada M, et al. 2003. Transmission of Staphylococcus aureus between healthy, lactating mothers and their infants by breastfeeding. J Hum Lact 19(4):411-417.
- Kriebs JM. 2016. Staphylococcus Infections in Pregnancy: Maternal and Neonatal Risks. J Perinat Neonatal Nurs. 30(2):115-23.
- Laibl V, et al. 2005. Clinical Presentation of Community-Acquired Methicillin-Resistant Staphylococcus aureus in Pregnancy. Obstet Gynecol 106 (3):461-5.
- Leshem E et al. 2012. Transmission of Staphylococcus aureus from mothers to newborns. Pediatr Infect Dis J. 2012 Apr;31(4):360-3.
- Lazenby GB, et al. 2012. Methicillin-resistant Staphylococcus aureus colonization among women admitted for preterm delivery. Am J Obstet Gynecol. 206(4):329.e1-5.
- Maglio D, et al. 2005. Simulation of antibiotic pharmacodynamic exposure for the empiric treatment of nosocomial bloodstream infections: a report from the OPTAMA program. Clin Ther. 27(7):1032-42.
- Piva S, Mariella J, et al 2021. Epidemiologic case investigation on the zoonotic transmission of Staphylococcus aureus infection from goat to veterinarians. Zoonoses Public Health. 2021 Sep;68(6):684-690.
- Price M, et al. 1998. Prevalence of methicillin-resistant Staphylococcus aureus in a dermatology outpatient population. South Med J 91:369-71.
- Saravolatz L, et al. 1982. Methicillin-resistant Staphylococcus aureus: epidemiologic observations during a community-acquired outbreak. Ann Intern Med. 96:11-16.
- Sheffield JS. 2013. Methicillin-resistant Staphylococcus aureus in obstetrics. Am J Perinatol. 30(2):125-9.
- The Centers for Disease Control and Prevention (CDC). 2011. Staphylococcus aureus in Healthcare Settings.
- The Centers for Disease Control and Prevention (CDC). 2018. Staphylococcal (Staph) Food Poisoning. https://www.cdc.gov/foodsafety/diseases/staphylococcal.html [Accessed 9/2022].
- The Centers for Disease Control and Prevention (CDC) & The National Institute for Occupational Safety and Health (NIOSH). 2015. MRSA and the Workplace. <a href="https://www.cdc.gov/niosh/topics/mrsa/default.html">https://www.cdc.gov/niosh/topics/mrsa/default.html</a> [Accessed 9/2022].
- Younger Meek, American Academy of Pediatrics, et al. 2022. Policy Statement: Breastfeeding and the Use of Human Milk. Pediatrics; 150 (1): e2022057988.